

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-9 (Canceled).

Claim 10 (Previously Presented): A method for measuring movement of a solid, in which at least one first translation of the solid is measured, the method comprising:

a series of measuring acceleration of the solid and making double integration of the measurements, to obtain successive values of the first translation;

a series of absolute measurement of at least one second degree of freedom of the solid, the second degree of freedom being a rotation, by at least one rotation sensor;

converting the measurement of rotation into a measurement of translation; and

using the translation measurement to update the first translation.

Claim 11 (Previously Presented): A method as in claim 10, wherein the measurement of the second degree of freedom is used as an initial condition to obtain by double integration a value of the first translation that follows previously obtained values of the first translation.

Claim 12 (Previously Presented): A method as in claim 10, wherein each absolute measurement is made at a same time as a measurement of the acceleration of the solid.

Claim 13 (Previously Presented): A method as in claim 10, wherein the converting the measurement of rotation into a measurement of translation uses kinetic models of the solid and/or of movement of the solid, enabling determination of relationships between the rotation and translation.

Claim 14 (Previously Presented): A method as in claim 10, wherein the rotation sensor is chosen from among accelerometers and magnetometers.

Claim 15 (Previously Presented): A method as in claim 10, wherein the first translation is measured using a translation sensor that is also the rotation sensor.

Claim 16 (Currently Amended): A method as in claim 10, A method for measuring movement of a solid, in which at least one first translation of the solid is measured, the method comprising:

a series of measuring acceleration of the solid and making double integration of the measurements, to obtain successive values of the first translation;

a series of absolute measurement of at least one second degree of freedom of the solid, the second degree of freedom being a rotation, by at least one rotation sensor;

converting the measurement of rotation into a measurement of translation; and using the translation measurement to update the first translation,

wherein a criterion of slowness of movement is chosen, and if the movement meets this criterion after one of the measurements of the second degree of freedom, the measurement of the second degree of freedom obtained is used to update the first translation.

Claim 17 (Previously Presented): A method as in claim 16, wherein the criterion of slowness of movement is lying of a function of an acceleration norm of the solid below a predetermined threshold.

Claim 18 (Previously Presented): A method as in claim 17, wherein the function of the acceleration norm of the solid is the norm itself.

Claim 19 (New): A method for measuring movement of a solid, in which at least one first translation of the solid is measured, the method comprising:

a series of measuring acceleration of the solid and making double integration of the measurements to obtain successive values of the first translation;

a series of absolute measurement of at least one second degree of freedom of the solid, the second degree of freedom being a rotation, by at least one rotation sensor;

converting the measurement of rotation into a measurement of translation; and

using the translation measurement to update the first translation,

wherein the first translation of the solid is measured by means of an acceleration sensor which measures all accelerations, in particular the acceleration caused by gravity, and the thus measured acceleration of gravity is suppressed to determine the acceleration of the solid.